

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1-10. (Canceled)

11. (Currently Amended) A power source, comprising:

first and second batteries; [[and]]

means for operating each of the first and second batteries in a pulse current discharge mode while supplying continuous current to a load when no voltage differential exists between the first and second batteries and when a current required by the load exceeds a threshold in response to the current required by the load exceeding a threshold, and;

means for continuously coupling the first and second batteries to the load when no voltage differential exists between the first and second batteries and when the current required by the load is below the threshold in response to the current required by the load being below a threshold; and

means for continuously coupling the battery with a greater voltage to the load when a voltage differential exists between the first and second batteries.

12. (Currently Amended) The power source of claim 11 wherein the means for operating each of the first and second batteries in a pulse discharge mode comprises a first switch configured to intermittently couple [[to]] the first battery to the load, a second switch configured to intermittently couple the second battery to the load, and means for controlling the first and second switches.

13. (Original) The power source of claim 12 wherein the means for operating each of the first and second batteries in a pulse discharge mode further comprises means for measuring the current supplied to the load, the means for controlling the first and second switches being responsive to the measured current.

14. (Original) The power source of claim 12 wherein the means for controlling the first and second switches is configured to couple the first battery to the load before removing the second battery from the load.

15. (Original) The power source of claim 12 wherein the means for controlling the first and second switches is responsive to voltage measured at each of the first and second batteries.

16-29. (Canceled)

30. (Currently Amended) A wireless communications device, comprising:
a processor configured to support wireless communications, the processor being further configured to operate in a traffic state or an idle state;

first and second batteries; and

a power management module configured to operate each of the first and second batteries in a pulse current discharge mode while supplying continuous current to the processor when no voltage differential exists between the first and second batteries and when the wireless communications device is in the traffic state,

wherein the power management module is further configured in response to the wireless communications device being operated in the traffic state, and to continuously couple the first and second batteries to the processor when no voltage differential exists between the first and second batteries and when the wireless communications device is in the idle state in response to the processor being operated in the idle state, and

wherein the power management module is further configured to continuously couple the battery with a greater voltage to the processor when a voltage differential exists between the first and second batteries.

31. (Original) The wireless communications device of claim 30 wherein the power management module comprises a switch control module, and a switch configured to intermittently couple the first and second batteries to the processor under control of the switch control module.

32. (Original) The wireless communications device of claim 31 wherein the switch comprises a first switch configured to intermittently couple the first battery to the processor under control of the switch control module, and a second switch configured to intermittently couple the second battery to the processor under control of the switch control module.

33. (Original) The wireless communications device of claim 32 wherein the first and second switches each comprises a field effect transistor.

34-36. (Canceled)

37. (Previously Presented) The wireless communications device of claim 30 wherein the power management module is further configured to determine the processor state as a function of the current supplied to the processor.

38. (Original) The wireless communications device of claim 30 wherein the switch control module is further configured to control the switch as a function of voltage measured at each of the first and second batteries.

39. (Currently Amended) The wireless communications device of claim 38 wherein the selection module is further configured to control the switch to couple one of the first and second batteries having the highest voltage to the ~~load~~ processor.

40. (Canceled)

41. (Currently Amended) A power source, comprising:
first and second batteries; and
a power management module configured to operate each of the first and second batteries in a pulse current discharge mode while supplying continuous current to a load when no voltage differential exists between the first and second batteries and when a current required by the load exceeds a threshold.

wherein the power management module is further configured in response to the current required by the load exceeding a threshold, and to continuously couple the first and second batteries to the load when no voltage differential exists between the first and second batteries and when the current required by the load is below the threshold in response to the current required by the load being below a threshold, and

wherein the power management module is further configured to continuously couple the battery with a greater voltage to the load when a voltage differential exists between the first and second batteries.

42. (Previously Presented) The power source of claim 41 wherein the power management module comprises a switch control module, and a switch configured to intermittently couple the first and second batteries to the load under control of the switch control module.

43. (Previously Presented) The power source of claim 42 wherein the switch comprises a first switch configured to intermittently couple the first battery to the load under control of the switch control module, and a second switch configured to intermittently couple the second battery to the load under control of the switch control module.

44. (Previously Presented) The power source of claim 43 wherein the first and second switches each comprises a field effect transistor.

45. (Previously Presented) The power source of claim 42 wherein the switch control module is further configured to control the switch such that the first battery is coupled to the load before removing the second battery from the load.

46. (Previously Presented) The power source of claim 42 wherein the switch control module is further configured to control the switch as a function of voltage measured at each of the first and second batteries.

47. (Previously Presented) The power source of claim 42 wherein the selection module is further configured to control the switch to couple one of the first and second batteries having the highest voltage to the load.